

REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

After entry of the present amendment, Claims 1-6, 11, 12, 22, and 32-35 are pending in the present application. Claims 7-10, 13-21, 23-31, and 37-45 have been canceled without prejudice or disclaimer.

In the outstanding Office Action, Claim 30 was rejected under the second paragraph of 35 U.S.C. § 112, Claims 1-6, 11, 12, 22, 32, 33 and 36 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 4,961,391 to Mak et al. (hereinafter "Mak") in view of U.S. Patent No. 5,595,483 to Melber et al. (hereinafter "Melber"), Claims 34 and 35 were allowed, and Claim 30 was indicated to allowable if it were rewritten to overcome the rejections under the second paragraph of 35 U.S.C. § 112.

Applicants note, with appreciation, the indication of allowable subject matter.

The rejections applied to Claim 30 under the second paragraph of 35 U.S.C. § 112 are respectfully submitted to be moot in view of the cancellation of Claim 30 by the present amendment.

The rejection of Claims 1-6, 11, 12, 22, 32, 33 and 36 under 35 U.S.C. § 103(a) as unpatentable over Mak in view of Melber is respectfully traversed.

As noted in the last response, previously presented independent Claim 1 includes the feature that a gaseous substance produced by the thermal decomposition of the organic halides is heated at an exhaust portion of the hermetic zone under the vacuum state. By adopting this feature, the gaseous substance is heated again under a vacuum state, thereby exhaust gas can be made cleaner.

As also noted in the last response, the teachings and reasonable suggestions found in Mak and/or Melber do not include the feature that a gaseous substance produced by the

thermal decomposition of the organic halides is heated at an exhaust portion of the hermetic zone under the vacuum state. Instead, Mak simply teaches that the matrix material is heated and gas is produced from the matrix material and Melber does not cure this deficiency in Mak by teaching or suggesting such a heating step being applied to the gaseous substance at an exhaust portion of a hermetic zone under a vacuum state, all as required by previously presented independent Claim 1.

Instead of presenting a proper showing of evidence of this claimed feature of a gaseous substance produced by the thermal decomposition of the organic halides being heated at an exhaust portion of the hermetic zone under the vacuum state, the outstanding Action simply incorrectly assumes that there is no difference if this claimed feature is present or not and suggests that this claimed subject matter can be dismissed as an "obvious matter of design choice to a person of ordinary skill in the art . . . because applicant ahs [sic, has] not disclosed that [sic, this feature] provides an advantage, is used for a particular purpose or solves a stated problem."

As clearly established by the PTO reviewing court, there is no requirement that an application disclose providing particular advantages as to a disclosed and claimed feature before such advantages can be urged to demonstrate that a "design choice" rationale offered in place of evidence of obviousness is without merit. See *In re Chu*, 36 USPQ2d 1089, 1094-95 (Fed. Cir. 1995) as follows:

The Board concluded, however, that [the claimed feature] was a matter of "design choice" and that [Applicant's] evidence and arguments to the contrary were unpersuasive because [Applicant's] "specification is virtually silent on the matter of any purported advantage [of the claimed feature]" and "does not state that the claimed [feature] solves any particular problem or produces any unexpected result."

Because the Board was required to consider the totality of the record, the Board was not free to disregard the evidence and arguments presented by [the Applicant] in response to the obviousness rejection. Additionally, the Board erred in apparently requiring [the Applicant's] evidence and arguments responsive to the obviousness rejection to be within his specification in order

to be considered. To require [the Applicant] to include evidence and arguments in the specification regarding whether [the claim feature] was a matter of "design choice" would be to require patent applicants to divine the rejections the PTO will proffer when patent applications are filed. Additionally, the cases the Board relied on do not support its position that evidence and arguments must be found in the specification to be considered in an obviousness determination.

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We have found no cases supporting the position that a patent applicant's evidence and/or arguments traversing a Section 103 rejection must be contained within the specification. There is no logical support for such a proposition as well, given that obviousness is determined by the totality of the record including, in some instances most significantly, the evidence and arguments proffered during the give-and-take of ex parte patent prosecution.

Thus, the court in *Chu* dismissed the PTO attempt there to suggest that there was authority requiring that a patent applicant's evidence and/or arguments traversing a suggestion that a particular claim feature is a matter of "design choice" must be contained within the specification.

Here, the subject matter of Claim 1 includes the soil first being heated in a hermetic zone under a vacuum state. The present applicants discovered that even though the soil is heated in the hermetic zone, the temperature at the exhaust portion becomes lower than the temperature of this first soil heating and that as the temperature undergoes the noted gradual decrease at the exhaust portion the gaseous substance of the decomposed organic halide is recomposed. Therefore, in order to insure against the decomposed organic halide being recomposed, Claim 1 subject matter includes the further requirement for "heating, at an exhaust portion of the hermetic zone also under the vacuum state, a gaseous substance produced by the thermal decomposition of the organic halides."

Accordingly, this Claim 1 subject matter of "heating, at an exhaust portion of the hermetic zone also under the vacuum state, a gaseous substance produced by the thermal decomposition of the organic halides" is very advantageous as it serves to avoid this recomposing and this feature cannot be categorized as a mere "design choice" or labeled

obvious subject matter without any evidence at all as to some reason to modify Mak in view of Melber to incorporate this claimed subject matter.

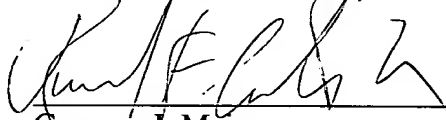
Independent Claims 11, 22, 32, 33, and 36 are also rejected under 35 U.S.C. §103(a) as being unpatentable over Mak in view of Melber. These claims all include similar features to the above-argued feature of Claim 1 and the above-noted arguments as to the deficiencies of Mak and/or Melber apply to independent Claims 11, 22, 32, 33, and 36 as well as to independent Claim 1.

The rejections of Claims 2-6, dependent on Claim 1, and Claim 12, dependent on Claim 11, are traversed for the reasons noted above as to these independent Claims 1 and 11.

Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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